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EXAMINER
NORTON, JENNIFER L

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 March 2008*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,9-20 and 25* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,9-20 and 25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 August 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   The following is a **Non-Final Office Action** in response to the Request for

Continued Examination filed on 11 March 2008. Claims 1, 12 and 20 have been

amended. Claims 7, 8, 21-24 and 26-28 were previously cancelled. Claims 1-6, 9-20

and 25 are pending in this application.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented
> and the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-6, 9-11, 20 and 25 are rejected under 35 U.S.C. 103(a) as being

unpatentable over U.S. Patent Publication No. 2003/0150909 (hereinafter Markham) in

view of U.S. Patent No. 6,421,571 (hereinafter Spriggs) in further view of U.S. Patent

No. 6,524,230 (hereinafter Harding).

4.   As per claim 1, Markham teaches a method of monitoring and controlling a

manufacturing process to enable at least one manufactured product to meet at least

one specification, the method comprising the steps of:

        providing at least one key process indicator (KPI) dashboard (pg. 4, par.

[0049]) with a statistical process control (SPC) subsystem (pg. 9, par. [0116]), pg. 20, par. [0206] and pgs. 23-24, par. [0228]) for at least one manufacturing sub-process (pg. 2, par. [0035]);

automatically collecting product specific data (pg. 1, par. [0012] and pg. 7, par. [0083]) from the manufacturing sub-process (pgs. 21-22, par. [0212]) through at least one data collecting apparatus (pgs. 19-20, par. [0200] and Fig. 1, element 58);

storing said product specific data in at least one database (pg. 3, par. [0039], pg. 20, par. [0201] and Fig. 2, element 70);

setting at least one specification for the at least one product and the at least one manufacturing sub-process (pg. 17, par. [0183]);

accessing the at least one database with the KPI dashboard (pg. 2, par. [0035], pg. 3, par. [0039], pg. 11, par. [0133] and pgs. 19-20, par. [0200]);

setting at least one alarm (pg. 5, par. [0058] and pg. 6, par. [0064]) for the at least one product and the at least one manufacturing sub-process (pg. 8, par. [0008] and pgs. 30-31, par. [0280]); and

comparing the product specific data with the at least one alarm (pg. 5, par. [0058] and pgs. 5-6, par. [0062] and [0064]) and/or the at least one specification (pg. 5, par. [0059]) and notifying at least one user when the product specific data triggers the at least one alarm and/or the at least one specification (pg. 5, par. [0060], pg. 6, par. [0064], pgs. 19-20, par. [0200] and [0203] and pgs. 30-31, par. [0280]).

Markham teaches to a method substantially the same as claimed but does not

expressly teach to notifying at least one user in real time when the product specific data

triggers the at least one alarm and/or the at least one specification (pg. 20, par. [0206]

and pgs. 23-24, par. [0206] and [0208]); and the product specific data is automatically

collected and stored at regular time intervals.

Spriggs teaches to notifying at least one user in real time (col. 9, lines 14-21)

when data triggers the at least one alarm and/or the at least one specification (col. 10,

lines 23-49 and col. 11, lines 1-12).

Spriggs does not expressly teach data is automatically collected and stored at

regular time intervals.

Harding teaches data is automatically collected and stored at regular time

intervals (col. 25, lines 52-60).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time of applicant's invention to modify the teaching of Markham to include notifying

at least one user in real time when data triggers the at least one alarm and/or the at

least one specification to reduce operating costs, provide fewer and less severe failures

and better production availability (Spriggs: col. 1, lines 35-46 and col. 2, lines 27-38);

and data is automatically collected and stored at regular time intervals for the

advantage of collecting and storing diagnostic information to perform enhanced and

automated manufacturing functions (Harding: col. 2, lines 25-28).

5.   As per claim 2, Markham teaches as set forth above collecting and storing

product specific data steps comprise automatically collecting and storing first product

specific data in the at least one database (pg. 7, par. [0083], pg. 9, par. [0116], pg. 16,

par. [0175] and pg. 20, par. [0206]) and manually collecting and storing at least one

piece of second product specific data in the same at least one database (pgs. 6-7, par.

[0077] and pg. 9, par. [0119]).

6.   As per claim 3, Markham teaches as set forth the step of storing product

identifying data (pg. 17, par. [0183]) and manufacturing plant specific data (pg. 17,

par. [0178]) together in the at least one database (pg. 20, par. [0201] and pg. 26, par.

[0244] and [0245]).

7.   As per claim 4, Markham teaches as set forth the step of allowing the user to

select at least one manufacturing sub-process through the KPI dashboard (pgs. 26-27,

par. [0251]).

8.   As per claim 5, Markham teaches as set forth automatically collecting (pg. 8, par.

[0096], pg. 9, par. [0116], pg. 20-21, par. [0206]-[0207] and pg. 23-24, par. [0226]

and [0228]) and storing the product specific data steps comprise collecting and storing

at least one measure specific to the at least one selected manufacturing sub-process

that enables the manufactured product to meet the at least one specification (pg. 26,

par. [0245]).

9.   As per claim 6, Markham teaches the setting of the at least specification step

comprises setting at least one specification for the at least one measure (pg. 17, par.

[0183]) and the setting of the at least one alarm step (pg. 5, par. [0058] and pg. 6,

par. [0064]).

Markham does not expressly teach setting a range of specifications and alarms

for the measure.

Spriggs teaches to setting a range of specifications and alarms for the measure

(col. 10, lines 1-2 and 22-30).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time of applicant's invention to modify the teaching of Markham to include setting a

range of specifications and alarms for the measure to reduce operating costs, provide

fewer and less severe failures and better production availability (col. 1, lines 35-46 and

col. 2, lines 27-38).

10.   As per claim 9, Markham teaches as set forth above the step of entering

into the at least one database a reason for the collected measure falling outside of the

at least one range of alarms and/or specifications (pg. 8, par. [0093], [0096] and

[0102] and pg. 9, par. [0119]).

11.   As per claim 10, Markham teaches as set forth above the step of entering a

corrective action into the at least one database, which was taken to prevent the at least

one measure from falling outside of the at least one range of alarms and/or

specifications (pg. 9, par. [0119]).

12.   As per claim 11, Markham teaches as set forth the step of generating at least

one report based on the product specific data stored in the at least one database (pgs.

26-27, par [0251]-[0253]).

13.   As per claim 20, Markham teaches a method of allowing a user to access a plant

management database and configure and manipulate the data stored therein, the

method comprising:

    providing at least one piece of manufacturing equipment capable of producing at

least one product (pg. 23, par. [0227]);

    collecting automatically a first product specific data (pg. 1, par. [0012] and pg. 7,

par. [0083], pg. 9, par. [0116], pg. 20-21, par. [0206]-[0207] and pg. 23-24, par.

[0226] and [0228]) from the at least one piece of manufacturing equipment (pg. 7, par. [0083], pg. 9, par. [0116], pg. 16, par. [0175] and pg. 20, par. [0206]);

entering manually second product specific data for the at least one product produced from the manufacturing equipment (pgs. 6-7, par. [0077] and pg. 9, par. [0119]);

setting at least one of specification (pg. 17, par. [0183]) and at least one alarm for the at least one product (pg. 5, par. [0058] and pg. 6, par. [0064]); and

storing the first product data, the second product specific data, the at least one specifications, and the at least one alarm together in the same at least one database (pg. 20, par. [0201] and pg. 26, par. [0244] and [0245]), and

comparing the first product specific data with the second product specific data to the at least alarm (pg. 5, par. [0058] and pgs. 5-6, par. [0062] and [0064]) and/or the at least one specification (pg. 5, par. [0059]) and notifying at least one user when the first product specific data and/or the second specific product data falls outside of the at least alarm and/or the at least one specification setting (pg. 6, par. [0064], pgs. 19-20, par. [0200] and [0203] and pgs. 30-31, par. [0280]).

Markham teaches to a method substantially the same as claimed but does not expressly teach notifying at least one user in real time when the first product specific data and/or the second specific product data falls outside of the at least alarm and/or the at least one specification setting (pg. 20, par. [0206] and pgs. 23-24, par. [0206]

and [0208]), the first product specific data is automatically collected and stored at regular time intervals, and setting a range of alarms and/or specifications.

Spriggs teaches to setting a range of alarms and/or specifications (col. 10, lines 1-2 and 22-30); and notifying at least one user in real time (col. 9, lines 14-21) when data triggers the at least one alarm and/or the at least one specification (col. 10, lines 23-49 and col. 11, lines 1-12).

Spriggs does not expressly teach the first product specific data is automatically collected and stored at regular time intervals.

Harding teaches data is automatically collected and stored at regular time intervals (col. 25, lines 52-60).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Markham to include to setting a range of alarms and/or specifications; and notifying at least one user in real time when data triggers the at least one alarm and/or the at least one specification to reduce operating costs, provide fewer and less severe failures and better production availability (Spriggs: col. 1, lines 35-46 and col. 2, lines 27-38); and data is automatically collected and stored at regular time intervals for the advantage of collecting and storing diagnostic information to perform enhanced and automated manufacturing functions (Harding: col. 2, lines 25-28).

14.   As per claim 25, Markham teaches as set forth above the step of generating at

least one report based on the first product specific data and/or the second product

specific data stored in the at least one database (pgs. 26-27, par. [0251]-[0253]).

15.   Claims 12-14, 18 and 19 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Markham in view of Harding.

16.   As per claim 12, Markham teaches a method of monitoring at least one

manufacturing process for at least one manufacturing plant, the method comprising the

steps of:

        entering product identifying data for at least one product into a first data entry

field (pg. 17, par. [0183]);

        entering manufacturing plant specific data into a second data entry field (pg. 17,

par. [0178] and [0179]);

        assigning at least one data collecting apparatus to at least one manufacturing

sub-process that produces the at least one product (pg. 17, par. [0183]);

        automatically collecting first product specific data (pg. 1, par. [0012] and pg. 7,

par. [0083]) with the at least one collecting data apparatus (pgs. 19-20, par. [0200]

and Fig. 1, element 58) from the at least one manufacturing sub-process (pgs. 21-22,

par. [0212]); and

        storing the product identifying data, the plant specific data and the first product

specific data together in at least one database (pg 3, par. [0039], pg. 20, par. [0201],

pg. 26, par. [0244] and [0245] and Fig. 2, element 70).

Markham does not expressly teach wherein the first product specific data is

automatically collected and stored at regular time intervals

Harding teaches data is automatically collected and stored at regular time

intervals (col. 25, lines 52-60).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time of applicant's invention to modify the teaching of Markham to include data is

automatically collected and stored at regular time intervals for the advantage of

collecting and storing diagnostic information to perform enhanced and automated

manufacturing functions (col. 2, lines 25-28).

17.   As per claim 13, Markham teaches as set forth above the step of manually

collecting second product specific data from the at least one product and entering the

data (pgs. 6-7, par. [0077] and pg. 9, par. [0119]) in the same at least one database

that stores the product identifying data, the plant specific data and the first product

specific data (pg. 20, par. [0201] and pg. 26, par. [0244] and [0245]).

18.   As per claim 18, Markham teaches as set forth above the step of generating at

least one report from the product identifying data, the plant specific data, the

automatically collected (pg. 8, par. [0096], pg. 9, par. [0116], pg. 20-21, par. [0206]-[0207] and pg. 23-24, par. [0226] and [0228]) first product specific data, and the second product specific data stored in the same at least one database (pgs. 26-27, par [0251]-[0253]).

19.   As per claim 19, Markham teaches as set forth above the step of enabling at least one user to access the at least one database in order to track the at least one product through at least one step of the at least one manufacturing sub-process (pgs. 26-27, par. [0251]-[0253]).

20.   Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Markham in view of Harding in further view of Spriggs.

21.   As per claim 14, Markham teaches the step of setting at least one specification for the first product specific data (pg. 17, par. [0183]).

        Markham does not expressly teach the step of setting at least one range of specifications.

        Harding does not expressly teach the step of setting at least one range of specifications.

Spriggs teaches the step of setting at least one range of specifications (col. 10, lines 1-2 and 22-30).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Markham in view of Harding to include step of setting at least one range of specifications to reduce operating costs, provide fewer and less severe failures and better production availability (col. 1, lines 35-46 and col. 2, lines 27-38).

22.   As per claim 15, Markham teaches a method substantially the same as claimed but does not expressly teach the step of notifying the user in real time when the first product specific data falls outside the at least one range of specifications (pg. 20, par. [0206] and pgs. 23-24, par. [0206] and [0208]).

Harding does not expressly teach the step of notifying the user in real time when the first product specific data falls outside the at least one range of specifications.

Spriggs teaches to the user in real time (col. 9, lines 14-21) when the first product specific data falls outside the at least one range of specifications (col. 10, lines 23-49 and col. 11, lines 1-12).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Markham in view of Harding to include the user in real time when the first product specific data falls outside the at

least one range of specifications to reduce operating costs, provide fewer and less

severe failures and better production availability (col. 1, lines 35-46 and col. 2, lines 27-

38).

23.   As per claim 16, Markham teaches to the step of setting at least one alarm (pg.

5, par. [0058] and pg. 6, par. [0064]).

Markham does not expressly teach the step of setting at least one alarm within

the at least one range of specifications.

Harding does not expressly teach the step of setting at least one alarm within the

at least one range of specifications.

Spriggs teaches the step of setting at least one alarm within the at least one

range of specifications (col. 10, lines 1-2 and 22-30).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time of applicant's invention to modify the teaching of Markham in view of Harding

to include the step of setting at least one alarm within the at least one range of

specifications to reduce operating costs, provide fewer and less severe failures and

better production availability (col. 1, lines 35-46 and col. 2, lines 27-38).

24.   As per claim 17, Markham teaches as set forth above the step of notifying the

user in real time when the first product specific data triggers the alarm (pg. 6, par.

[0064], pgs. 19-20, par. [0200] and [0203] and pgs. 30-31, par. [0280]).

Response to Arguments

25.   Applicant's arguments see Remarks pgs. 8-10, filed 11 March 2008 with respect

to claims 1-5, 11-15, 18 and 19 under 35 U.S.C. 102(e) have been considered but are

moot in view of the new ground(s) of rejection.

26.   Applicant argues that the prior art fails to teach, "setting both at least one alarm

and at least on specification for the product"; the Examiner respectfully disagrees.

> As per Applicant's Specification (pg. 13, lines 7-19), FIG. 4a shows
> a screen shot of an Alarms and Specifications screen 46. As shown in
> FIG. 4a, Alarms and Specifications screen 46 allows a user to define the
> range of the values for the alarms and specifications. As used herein,
> the term **"specification" refers to the values of a measure of a
> product that must not be exceeded or that must be exceeded for
> the user to be able to sell the product (i.e. a regulatory
> specification or a customer specification)**. As used herein, the
> term **"alarm" refers to the values of a measure of a product that
> are close to and fall within the range of the values of the
> specification, so that when the alarm values are reached, the
> user will be notified that the measure is close to the
> specifications.** Referring to FIG. 2b, if specifications have not been set
> for a particular measure 44 on the KPI dashboard, a setup target button
> 34 will appear on the KPI dashboard. In this embodiment, the Alarms
> and Specifications screen 46 can be accessed by pressing the setup
> target button 34 on the KPI dashboard 40 or if alarms and specifications
> have been set for each measure, by selecting the "Update Alarms and
> Specs" tab 47 from the dropdown menu 48 (shown in FIG. 2a).

Markham teaches (pg. 17, par. [0183]), Many products are produced with a wide range of attributes, such as tissue with different colors, print patterns, topical additives, and so forth, or diapers having different sizes. **A change in the grade for a product generally requires a variety of different process settings to be adjusted according to a recipe for that grade.** Setpoint changes or other setting changes may be tracked and recorded in an audit table that is part of or linked to PIPE data such that the setpoints used for any particular production run may be associated with the products for subsequent analysis or for providing documentation needed for **regulatory compliance.** Software systems may be used to track and record current setpoints and to update recipes when new or experimental setpoints are found to offer improvements.

(pg. 5, par. [0058]) a) **setting alert criteria for automatic report generation of an alert**, such a setting including a cost threshold for a predetermined unit of time (e.g., a shift, day, or week, or moving time frames such as the past hour, 24 hours, 3 days, week, and so forth), such as the total cost of waste and delay during the unit of time, the total cost of waste and delay from a specified subcategory of event types during the unit of time (e.g., web breaks or equipment failure), or, rather than considering costs over a unit of time, also or alternatively setting a threshold for the cost of any single event or any event of a predetermined type (e.g., generate an alert if any waste event has a cost of $2,000 or greater, or results in a lost of at least 500 units of production);

(pgs. 30-31, par. [0280]) The invention provides an intelligent manufacturing system including a process for converting raw materials to a product, a process control system including one or more sensors capable of **generating an alarm in response to an event that results in one of waste, machine delay, or decrease product quality,** a data logger associated with the process control system for obtaining event parameters associated with the event, a database on a server for recording event parameters obtained by the data logger, and a reporting system cooperatively associated with the database for reporting productivity parameters regarding the process derived at least in part from the event parameters.

Spriggs further teaches (col. 10, lines 23-50) Specifically, level alarms are comprised of basic over and under level alarms. For example,

a variable is in an over alarm condition if its value matches or exceeds an over setpoint and conversely, a variable is in an under alarm condition if its value matches or is below the under setpoint. **In-band alarms are alarms that fall between two boundaries or setpoints. Thus, a variable is in an in-band alarm condition if its value is within two boundaries or setpoints thereby defining an in-band setpoint region.** Out-of-band alarms are alarms that fall outside two boundaries or setpoints. Thus, a variable is in an out-of-band alarm condition if its value is outside the two boundaries or setpoints thereby defining an out-of-band setpoint region. Amplitude and phase regions that are in an "acceptable" region define the acceptance region alarms. Thus, if a vector value goes outside of this region, it will be in alarm. The "acceptable" region can be defined by the user or configured to predetermined default values. Spectral band alarms include full and single spectrum alarms. Parametric alarms are alarms that are defined by using Boolean logic to combine a variety of conditions into one event which is preferably assigned a severity. The types of conditions that can be used in a parametric event include measurement location statuses (e.g., Not Ok), measurement values (e.g., Direct Amplitude=5), date/time and schedules. As an example, IF (Direct Measurement is in a Level 1 Alarm) AND (Temperature>=500) AND (Time=2:00 a.m.) Then "Possible Problem" Event occurred and will be logged to a system event List 85.

In summary, Applicant defines the term "*specification*" as a value that is a regulatory specification, and Markham teaches to a setpoint value for regulatory compliance. The Applicant further defines the term "*alarm*" as the values of a measure of a product that are close to and fall within the range of the values of the specification, so that when the alarm values are reached, the user will be notified that the measure is close to the specifications, and Markham teaches to setting an alert criteria to generate an alarm in response to an event that results in one of waste, machine delay, or decrease product quality, and Spriggs teaches to an alarm condition is meet if its values fall within two setpoints thereby defining the an in-band setpoint region. Hence, the

combination of Markham in view of Spriggs meets the Applicant's claimed limitation,

"setting both at least one alarm and at least on specification for the product".

27.   Applicant's arguments see Remarks pgs. 11-13, filed 11 March 2008 with respect

to claims 6, 9, 10, 16, 17, 20 and 25 under 35 U.S.C. 103(a) have been considered but

are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

The following references are cited to further show the state of the art with

respect to a plant management system.

U.S. Patent No. 7,266,418 discloses a substrate processing apparatus, which

includes a plurality of process chambers for processing a substrate and a transfer part

for carrying in and carrying out the substrate to and from the plurality of process

chambers, includes a transfer history recording part, a process history recording part,

and an alarm history recording part.

U.S. Patent No. 7,272,532 discloses a method is provided for predicting a quality

characteristic of a product to be manufactured.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER L. NORTON whose telephone number is (571)272-3694. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on 571-272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Albert DeCady/
Supervisory Patent Examiner
Art Unit 2121